

CLAIMS

1. Optical fiber cable (1) comprising:
 - a central strength member (2);
 - a number of tubes (3) containing optical fibers (4); and
 - a protective outer jacket (6);characterized in that
 - the filling coefficient of optical fibers in at least one loose tube is $\geq 45\%$;
 - the tubes (3) comprise a material having an elasticity modulus ≥ 700 MPa; and
 - the optical fibers (4) have a microbending sensitivity $\leq 4,0$ dB· km^{-1} / g· mm^{-1} in a temperature range from about -30 °C to $+60$ °C at about 1550 nm.
2. Optical fiber cable (1) according to claim 1, wherein the optical fibers (4) are single mode, SM, or single mode reduced, SM-R, fibers.
3. Optical fiber cable (1) according to claim 1 or 2, wherein the tubes (3) comprise a material having an elasticity modulus ≥ 800 MPa.
4. Optical fiber cable (1) according to claim 1 or 2, wherein the tubes (3) comprise a material having an elasticity modulus ≥ 1000 MPa.
5. Optical fiber cable (1) according to any of claims 1-4, wherein the optical fibers (4) comprise an inner coating layer (4P) of a material having an elastic modulus lower than about 200 MPa when measured at -30 °C and lower than about 2 MPa when measured at a temperature from about $+20$ °C to $+60$ °C.
6. Optical fiber cable (1) according to claim 5, wherein the optical fibers (4) comprise an inner coating layer (4P) of a material having an elastic modulus lower than about 80 MPa when measured at about -30 °C.

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7. Optical fiber cable (1) according to claim 5, wherein the optical fibers (4) comprise an inner coating layer (4P) of a material having an elastic modulus between about 20 and 60 MPa when measured at about -30°C.
- 5 8. Optical fiber cable (1) according to any of claims 1-7, wherein the optical fibers (4) comprise a mass colored outer coating layer (4S).
9. Optical fiber cable (1) according to any of claims 1-8, wherein the filling coefficient of optical fibers in at least one loose tube is $\geq 50\%$.
10. Optical fiber cable (1) according to any of claims 1-9, wherein the tubes (3) are made of a material selected from the group consisting of: polybutylenetereftalate, high density polythene, medium density polythene and low density polytene.
11. Optical fiber cable (1) according to any of claims 1-10, wherein the tubes (3) have an inner diameter \leq about 1,25 mm.
- 15 12. Optical fiber cable (1) according to any of claims 1-10, wherein the tubes (3) have an inner diameter \leq about 1,20 mm.
13. Optical fiber cable (1) according to any of claims 1-12, wherein the outer diameter of colored optical fibers is about 0,245 mm.
- 20 14. Optical fiber cable (1) according to any of claims 1-13, wherein the external cable diameter is \leq about 7,0 mm with a number of optical fibers ≥ 72 .
15. Optical fiber cable (1) according to any of claims 1-13, wherein the external cable diameter is \leq about 6,0 mm with a number of optical fibers ≥ 72 .
- 25 16. Optical fiber cable (1) according to any of claims 1-15, wherein the outer jacket (6) is made of a material selected from the group consisting of: Polyamide 12, high density polythene, medium density polythene and low density polytene.

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17. Optical fiber cable (1) according to any of claims 1-15, wherein the outer jacket (6) is made of a graphite-charged Polyamide 12 compound.

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